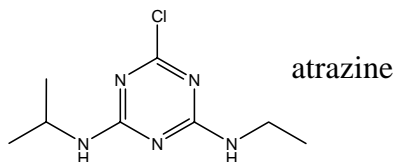


# Environmental Analysis Experiences for Appalachian High School Students and Teachers

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Two high school teachers from Appalachia were given a week long introduction to environmental analysis at Western Kentucky University using the determination of atrazine in river water near agriculture areas as an example. Atrazine is the most commonly used herbicide in Kentucky and its toxicity is still being debated. The teachers received background instruction from five University faculty and two masters students in the Departments of Chemistry, Biology and Geology on the following topics : chromatographic and immunoassay analysis, transport of atrazine in the karst aquifer, toxicology of atrazine, and ecological impacts of atrazine. Teachers also received hands-on training in sampling and chromatographic and immunoassay determination of atrazine. The PI visited the teachers' high school in April of 2005, where atrazine levels are generally high, and spoke to science classes and conducted atrazine immunoassay analyses of real water samples with students taking chemistry. The school will keep the immunoassay kit for future analyses. Students submitted project reports with a discussion of the results.



Chemistry students from Adair County High School (Appalachia) performing atrazine immunoassay analyses and mapping the results of collected water samples.